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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,861	12/16/2003	Christopher Hsu	LEE 2 00302	5353
27885	7590	09/22/2005	EXAMINER	
FAY, SHARPE, FAGAN, MINNICH & MCKEE, LLP 1100 SUPERIOR AVENUE, SEVENTH FLOOR CLEVELAND, OH 44114			KIM, SANG K	
			ART UNIT	PAPER NUMBER
			3654	

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/736,861	Applicant(s) HSU ET AL.	
	Examiner SANG KIM	Art Unit 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 11-34 and 37-75 is/are pending in the application.
- 4a) Of the above claim(s) 17-22, 42-48, 50, 52, 55, 56 and 71 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 11, 14-16, 23-28, 37, 39-41, 49, 51, 53, 54, 57-64, 68-70 and 72-75 is/are rejected.
- 7) ☒ Claim(s) 3-8, 12, 13, 31-34, 38 and 65-67 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/7/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

Claims 17-22, 42-48, 50, 52, 55, 56, and 71 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 3/14/05.

Applicant's election without traverse of species I (figures 2-7) in the reply filed on 3/14/05 is acknowledged.

Newly submitted claim 71 is withdrawn from consideration because it is not readable on the elected invention. The telescoping tube sections are shown in figure 8 (Species II).

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, a "generally helical shape" recited in claims 27-28 and 49 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. As depicted throughout the drawings, applicant's lower portion of the tube is a curved portion rather than a general helical shape.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the

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drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 23-28, 49, 51, 53-54, 57-60, 62-64 and 72-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR 2661118.

With respect to claims 1, 29, 51, 62 and 72, FR '118 shows a floating liner (3) comprising a tube (3) having first and second ends (left and right sides) and a passageway extending between the two ends, said first end and said passageway adapted to receive a metal wire (1), at least a portion of said tube (3) is made from a synthetic material, said tube (3) having a weight distribution that causes said first end to at least partially float up and down above (3 is floating above the top layer of the wire and can move up and down since it is not attached at any end) a top surface of a layer of metal wire (7) for at least a portion of a time [when] the wire is paid out of the container (6), see figure 1.

FR '118 does not explicitly state whether the synthetic tube is rigid or flexible.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to select a flexible material, many of which are known as synthetic rubber, in order to avoid breakage of the guide tube.

The term "liner or welding wire" used in the claim preamble does not patentably distinguish over the prior art, because it does not impart or define any particular structural limitations of the apparatus or relates only to a possible or intended use of the device.

With respect to claims 2, 30 and 64, as stated above, FR '118 teaches a downward force on said tube resulting from the weight distribution of the tube (3) is about equal to an upward force applied to said tube as the welding wire is paid out of the container (i.e., the wire passing through the tube is able to keep the tube floating above the stack of wire by keeping the wire speed relatively constant).

With respect to claims 23-26, 57-60 and 74, as stated above, FR '118 shows the passageway of the tube has an inner diameter that is at least twice the diameter of the dispensing material passing through the passageway, see figure 1.

With respect to claims 53-54, 63 and 73, as stated above, FR '118 shows a retainer ring (4) positioned on the top surface of the layers of wire, and the first end of the tube (3) floating closely adjacent to a top surface of the ring, see figure 1.

With respect to claims 27-28 and 49, as stated above, FR '118 does not explicitly show a lower portion of the tube in a helical shape.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to select a flexible synthetic material with a helical shape for the tube in

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order to guide and conform to natural bend of the wire to prevent any kink, twist or entanglement.

Claims 15-16, 40-41, 61 and 75 rejected under 35 U.S.C. 103(a) as being unpatentable over FR 2661118, in view of Cordora et al., U.S. Patent No. 2821092.

With respect to claims 15-16, 40, 61 and 75, FR '118 teaches a synthetic material but does not teach coating a low friction material.

Cordora '092 teaches a tubular liner member 16 formed from Telfon, which provides a low friction.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify or incorporate a low friction material, as taught by Cordora '092 into the guide tube of FR '118, to help guide the wire and prevent any damage to the wire caused by friction.

Claims 11, 37 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR 2661118, in view of Moll et al., U.S. Patent No. 5896654.

With respect to claims 11, 37 and 68, FR '118 shows a floating liner (3) comprising a tube (3) having first and second ends (left and right sides) and a passageway extending between the two ends, said first end and said passageway adapted to receive a metal wire (1), at least a portion of said tube (3) is made from a synthetic material, said tube (3) having a weight distribution that causes said first end to at least partially float up and down above (3 is floating above the top layer of the wire and can move up and down since it is not attached at any end) a

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top surface of a layer of metal wire (7) for at least a portion of a time [when] the wire is paid out of the container (6), see figure 1.

FR '118 does not explicitly state whether the synthetic tube is rigid or flexible along with a beveled opening.

Moll '654 shows a nozzle (10) with a beveled opening (13) to help guide the wire, see figures 1-3.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to select a flexible material, many of which are known as synthetic rubber, in order to avoid breakage of the guide tube along with a beveled opening of the tube as taught by Moll '654, to help guide the wire through the tube.

Claims 14, 39 and 69-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR '118 in view of Moll '654 as applied to claims 11, 37 and 68 above, and further in view of Cordora et al., U.S. Patent No. 2821092.

With respect to claims 14, 39 and 69-70, as stated above, FR '118 in view of Moll '654 teaches a synthetic material, but does not teach coating a low friction material.

Cordora '092 teaches a tubular liner member 16 formed from Telfon, which provides a low friction.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify or incorporate a low friction material, as taught by Cordora '092 into the guide tube of FR '118 in view of Moll '654, to help guide the wire and prevent any damage to the wire caused by friction.

Response to Arguments

Claims 9-10 and 35-36 have been canceled.

Claims 64-75 have been added.

Applicant's arguments with respect to all the pending claims have been considered but are moot in view of the new ground(s) of rejection.

The added recitation that a portion of the tube is flexible and able to move up and down necessitated the new grounds of rejection.

Allowable Subject Matter

The indicated allowability of claims 11, 14, 37 and 39 are withdrawn in view of the newly discovered reference(s) to FR 266118, Cordora '092, and Moll '654. Rejections based on the newly cited reference(s) follow as stated above.

Claims 3-8,12-13, 31-34, 38, 65-67 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SANG KIM whose telephone number is 571-272-6947. The examiner can normally be reached Monday through Friday from 8:00 A.M. to 5:30 P.M. alternating Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki, can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SK

9/14/05



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